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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,989	01/04/2002	Jerzy W. Miernik	062891.0635	9591

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EXAMINER	
NGUYEN, DUC MINH	
ART UNIT	**PAPER NUMBER**
2643	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/038,989	MIERNIK ET AL.	
	Examiner	Art Unit	
	Duc Nguyen	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 3,5,6,8,9,11,12,14,15,17-19,21-29 and 31-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 3,5,6,8,9,11,12,14,15,17-19,21-29 and 31-39 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The indicated allowability of claims 3, 5-6, 8-9, 11-12, 14-15, 17-19, 21-29, 31-39 is withdrawn in view of the newly discovered reference(s) to Patel et al (6,865,185), and Hitzeman (6,760,312). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 3, 5-6, 8-9, 11-12, 14-15, 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinho et al (JP02000209298A) in view of Baum et al (US 2002/0024964A1) and Patel et al (6,865,185).

Consider claims 5-6, 11-12, 17-19. Marinho teaches a method and system for upgrading service class of connections in a wireless network, comprising identifying a congested CoS in a sector of a wireless network (page 1 of the detail description, paragraphs 3-7; page 3 of the detail description, paragraph 19); determining bandwidth availability in the sector of the wireless network at an enhanced CoS in relation to the congested CoS (page 1 of the detail description, paragraphs 6-7; page 4 of the detail description, paragraphs 22-25); selecting a communications session in the congested CoS for upgrading (page 1 of the detail description, paragraphs 6-7; page 4 of the detail description, paragraphs 22-25); and upgrading the communications session to the enhanced CoS (page 1 of the detail description, paragraphs 6-7; page 4 of the detail

description, paragraphs 22-25; pages 5-6 of the detail description, paragraph 33). Marinho does not clearly teach upgrading the communications session to the enhanced CoS by modifying a CoS identifier of one or more packets of the communications session.

Baum teaches upgrading the communications session to the enhanced CoS by modifying a CoS identifier of one or more packets of the communications session (pages 11-12, paragraphs [0183]- [0184]; page 13, paragraph [0199]; fig. 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Baum into the teachings of Marinho in order to provide an improved techniques that aggregate a large number of physical connections, for presentation to a small number of high bandwidth ports and to provide a transport network in which customer data is private and secure.

Marinho in view of Baum does not clearly teach determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on packet delay of at least one or both of the base service class and the upgraded service class.

Patel teaches the congested CoS is identified based on at least one of the dropped packet, a floating average of a queue size and a current queue size for the CoS in the sector (packet size or a delay threshold; column(s) 2, line(s) 26 through column(s) 3, line(s) 3; column(s) 3, line(s) 42-67; column(s) 7, line(s) 20-25; column(s) 8, line(s) 25-65; column(s) 9, line(s) 5 through column(s) 11, line(s) 15; packet drop, column(s) 12, line(s) 6-20; class queue or queue for packet; column(s) 9, line(s) 5 through column(s) 11, line(s) 15) for the purposes of providing an improved method and system for queuing and handling traffic in a wireless communications

network that substantially eliminate or reduce problems and disadvantage associated with previous methods and systems such as limiting application throughput, consistency across the network, overall network efficiency, and rapid service creation (column(s) 1, line(s) 56 through column(s) 2, line(s) 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Patel into the teachings of Marinho in view of Baum for the purposes mentioned above.

Consider claims 3, 15, 9. Patel further teaches the limitations of these claims in (column(s) 2, line(s) 26-58; column(s) 9, line(s) 5-40; column(s) 10, line(s) 12-26).

Consider claims 8, 14. Marinho further teaches accessing a policy information base (database 160) comprising service policies for communication sessions in the congested CoS (pages 5-6 of the detail description, paragraph 33); identifying an upgradeable connection based on the service policy (pages 2-3 of the detail description, paragraphs 10-15); and selecting the upgradeable communication sessions for upgrading (pages 2-3 of the detail description, paragraphs 10-15).

4. Claims 21-22, 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinho et al (JP02000209298A) in view of Hitzeman (6,760,312).

Consider claims 21-22 and 31-32. Marinho teaches a method and system for upgrading service class of connections in a wireless network, comprising identifying a congested CoS in a sector of a wireless network (page 1 of the detail description, paragraphs 3-7; page 3 of the detail description, paragraph 19); determining bandwidth availability in the sector of the wireless network at an enhanced CoS in relation to the congested CoS (page 1 of the detail description,

paragraphs 6-7; page 4 of the detail description, paragraphs 22-25); selecting a communications session in the congested CoS for upgrading (page 1 of the detail description, paragraphs 6-7; page 4 of the detail description, paragraphs 22-25); and upgrading the communications session to the enhanced CoS (page 1 of the detail description, paragraphs 6-7; page 4 of the detail description, paragraphs 22-25; pages 5-6 of the detail description, paragraph 33). Marinho further teaches determining whether a performance increase is available to the connection by upgrading its service class from the base service class to the upgraded service class (higher data rate; page(s) 1, § 0004-0006 and page(s) 2, § 0011).

Marinho does not teach estimating the performance increase available to the connection by upgrading its service class from the base service class to the upgraded service class; and upgrading the service class if the performance increase meets an upgraded criterion.

Hitzeman teaches estimating the performance increase available to the connection by upgrading its service class from the base service class to the upgraded service class (column(s) 5, line(s) 16-28, line(s) 50 through column(s) 6, line(s) 22; e.g., sufficient network resources may not be available to guarantee the requested QoS parameters; column(s) 6, line(s) 23-33); and upgrading the service class if the performance increase meets an upgraded criteria (e.g., sufficient network resources may not be available to guarantee the requested QoS parameters, or hold until sufficient network resources become available at the requested QoS level; column(s) 6, line(s) 23-33) for the purposes of controlling the quality of service of a telephone call routed over an IP-based network (column(s) 1, line(s) 5-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Hitzeman into the teachings of Marinho for the purposes mentioned above.

5. Claims 23-29 and 33-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marinho et al (JP02000209298A) in view of Hitzeman (6,760,312) as applied to claims 22 and 32 above, and further in view of Patel et al (6,865,185).

Consider claims 23-24, 33-34. Marinho in view of Hitzeman does not clearly teach determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on packet delay of at least one or both of the base service class and the upgraded service class.

Patel teaches determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on packet delay of at least one or both of the base service class and the upgraded service class (packet size or a delay threshold; column(s) 2, line(s) 26 through column(s) 3, line(s) 3; column(s) 3, line(s) 42-67; column(s) 7, line(s) 20-25; column(s) 8, line(s) 25-65; column(s) 9, line(s) 5 through column(s) 11, line(s) 15) for the purposes of providing an improved method and system for queuing and handling traffic in a wireless communications network that substantially eliminate or reduce problems and disadvantage associated with previous methods and systems such as limiting application throughput, consistency across the network, overall network efficiency, and rapid service creation (column(s) 1, line(s) 56 through column(s) 2, line(s) 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Patel into the teachings of Marinho in view of Hitzeman for the purposes mentioned above.

Consider claims 25-26, 35-36. Patel further teaches determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on packet drops of at least one or both of the base service class and the upgraded service class (column(s) 2, line(s) 26 through column(s) 3, line(s) 3; column(s) 3, line(s) 42-67; column(s) 7, line(s) 20-25; column(s) 8, line(s) 25-65; column(s) 9, line(s) 5 through column(s) 11, line(s) 15; packet drop, column(s) 12, line(s) 6-20).

Consider claims 27-28, 37-38. Patel further teaches determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on a floating window average of the packet queue size for a sector of a wireless network in which the connection is to be established (column(s) 2, line(s) 26 through column(s) 3, line(s) 3; column(s) 3, line(s) 42-67; column(s) 7, line(s) 20-25; column(s) 8, line(s) 25-65; class queue or queue for packet; column(s) 9, line(s) 5 through column(s) 11, line(s) 15).

Consider claims 29, 39. Patel further teaches determining the performance increase available to the connection by upgrading its service class from the base class to the upgraded class based on both measured and forecasted criteria for both of the base service class and the upgraded service class (column(s) 8, line(s) 57-65; column(s) 9, line(s) 50-64; column(s) 15, line(s) 50-67).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is (571)272-7503. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kuntz Curtis can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Duc Nguyen
Primary Examiner
Art Unit 2643

7/22/05